



ATTORNEY DOCKET NO. 9907-003

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Taegwhan HYEON and Sangjin HAN

Serial No. 10/658,586

Examiner: Not Yet Assigned

Filed: September 8, 2003

Group Art Unit: 2879

For: **NANOSTRUCTURED CARBON MATERIALS HAVING EXCELLENT CRYSTALLINITY
AND LARGE SURFACE AREA SUITABLE FOR FUEL CELL ELECTRODES AND
METHOD FOR SYNTHESIZING THE SAME**

Confirmation No. 1934

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97 (b); or
(Within three months of filing national application; or date of entry of International application;
or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:
- ☐ Statement under 37 CFR 1.97 (e), or
 - ☐ a \$180 fee under 37 CFR 1.17 (p); or
- (After mailing of first Office Action, but prior to Notice of Allowance or Final Office Action)
- ☐ under 37 CFR 1.97 (d) together with:
- ☐ Statement under 37 CFR 1.97 (e), and
 - ☐ a \$180.00 fee set forth in 37 CFR 1.17 (p).
- (Filed after final action or notice of allowance, whichever occurs first, but before payment of

the issue fee)

☒ Applicant(s) submit herewith Form PTO 1449- Information Disclosure Citation together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

It is requested that the information disclosed herein be made of record in this application.

Any deficiency or overpayment should be charged or credited to deposit account number 13-1703. A duplicate copy of this sheet is enclosed.

Customer No. 20575

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Hosoon Lee
Limited Recognition Under 37 CFR § 10.9(b)

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date: February 25, 2004

Ilka Dalton



PATENT APPLICATION

Applicant: Taegwhan HYEON and Sangjin HAN
Filing Date: September 8, 2003

Serial No. 10/658,586

Group: 2879

INFORMATION DISCLOSURE CITATION
FORM PTO-1449 (Modified)U.S. PATENT DOCUMENTS

Exam <u>Init</u>	<u>Ref</u>	Document <u>Number</u>	Issue <u>Date</u>	<u>Name</u>	<u>Class</u>	Sub <u>Class</u>
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FOREIGN PATENT DOCUMENTS

Exam <u>Init</u>	<u>Ref</u>	Document <u>Number</u>	Publication <u>Date</u>	<u>Country</u>	<u>Name</u>
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OTHER DOCUMENTS

Exam <u>Init</u>	<u>Ref</u>	<u>Author, Title, Date, Pertinent Pages, Etc.)</u>
_____	_____	Sumio Iijima, <i>Helical Microtubules of Graphite Carbon</i> , Nature, Vol. 354, 7 November 1991, pages 56-58
_____	_____	Shekhar Subramoney, <i>Novel Nanocarbons-Structure, Properties, and Potential Applications</i> , Advanced Materials, 1998, 10, No. 15, pages 1157-1171
_____	_____	N. M. Rodriguez, <i>A Review of Catalytically Grown Carbon Nanofibers</i> , Journal of Materials Research, 1996, Vol. 8, No. 12, page 3233
_____	_____	T. W. Ebbesen & P. M. Ajayan, <i>Large-Scale Synthesis of Carbon Nanotubes</i> , Nature, Vol. 358, 16 July 1992, pages 220-221
_____	_____	Woo-Seok Cho et al., <i>Synthesis of Carbon Nanotubes From Bulk Polymer</i> , Applied Physics Letters, Vol. 69(2), 8 July 1996, pages 278-279
_____	_____	N. A. Kiselev et al., <i>Carbon Nanotubes From Polyethylene Precursors: Structure and Structural Changes Caused by Thermal and Chemical Treatment Revealed by HREM</i> , Elsevier Science Ltd., Vol. 36, No. 7-8, 1998, pages 1149-1157
_____	_____	F. J. Maldonado-Hodar et al., <i>Catalytic Graphitization of Carbon Aerogels by Transition Metals</i> , Langmuir Vol. 16, No. 9, 2000, pages 4367-4373
_____	_____	John W. Patrick, <i>Porosity in Carbons: Characterization and Applications</i> , 1995 Edward Arnold, pages 131-252
_____	_____	Dr. Kim Kinoshita, <i>Carbon: Electrochemical and Physicochemical Properties</i> , 1988 John Wiley & Sons, Inc., pages 31-34 and 115-123

Examiner: _____

Considered: _____